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| 26. | | | | | | | | | | | | | | | | | | | | | | | | Which best describes the definition of Type I “Small Appliance” as defined by the EPA?   |  |  |  |  | | --- | --- | --- | --- | | a. | Systems manufactured, charged and hermetically sealed with five pounds or less of refrigerant | c. | any appliance with more than 5 pounds of refrigerant | | b. | refrigerators, freezers, room air conditioners and central air-conditioners | d. | any appliance charged with less than two pounds of refrigerant | | |
| 27. | | | | | | | | | | | | | | | | | | | | | | | | | For service and repair and maintenance of small appliances, recovery equipment manufactured after \_\_\_\_\_ must be certified by an EPA approved organization.   |  |  |  |  | | --- | --- | --- | --- | | a. | July 1, 1992 | c. | January 1, 1995 | | b. | August 12, 1992 | d. | November 15, 1993 | |
| 28. | | | | | | | | | | | | | | | | | | | | | | | For small appliance use, the recovery unit manufactured after November 15, 1993, must be capable of recovering:   |  |  |  |  | | --- | --- | --- | --- | | a. | 80% of the refrigerant when the compressor is not operating | c. | 80% of the refrigerant when the compressor is operating or achieve a 4” vacuum under ARI-1993 | | b. | 90% of the refrigerant when the compressor is operating or achieve a 4” vacuum under ARI 740-1993 | d. | A & B above | | | |
| 29. | | | | | | | | | | | | | | | | | | | | | | The sale of Class I and Class II refrigerants is restricted to technicians certified by an EPA approved program after:   |  |  |  |  | | --- | --- | --- | --- | | a. | July 1,1992 | c. | Aug. 12, 1993 | | b. | November 15, 1993 | d. | November 14, 1994 | | | | |
| 30. | | | | | | | | | | | | | | | | | | | | | The release of vapor from the top of a charging cylinder when filling should:   |  |  |  |  | | --- | --- | --- | --- | | a. | be vented to the atmosphere | c. | not be vented and should be recovered | | b. | be vented if the quantity does not exceed 3 pounds | d. | be vented but not be inhaled | | | | | |
| 31. | | | | | | | | | | | | | | | | | | | | Should the regulations of the Clean Air Act (CAA) change after a technician becomes certified:   |  |  |  |  | | --- | --- | --- | --- | | a. | the technician must take a new exam to remain certified | c. | it will be the technician’s responsibility to comply with any  changes in the law | | b. | all technicians that previously passed with a grade over 80% will be “grandfathered” | d. | the technician will be retested with a required passing grade of 90% | | | | | | |
| 32. | | | | | | | | | | | | | | | | | | | Containers of HFC-134a are colored:   |  |  |  |  | | --- | --- | --- | --- | | a. | green | c. | light blue | | b. | white | d. | Yellow | | | | | | | |
| 33. | | | | | | | | | | | | | | | | | | System dependant refrigerant recovery of small appliances:   |  |  |  |  | | --- | --- | --- | --- | | a. | does not require an operating compressor | c. | recovers refrigerant into a non-pressurized container | | b. | requires 80% of the charge to be recovered | d. | all of the above | | | | | | | | |
| 34. | | | | | | | | | | | | | | | | | Mixed refrigerant sent to reclaim centers:   |  |  |  |  | | --- | --- | --- | --- | | a. | may be disposed of at owners expense | c. | can be reused as is | | b. | can be reclaimed and resold | d. | just needs to be filtered | | | | | | | | | |
| 35. | | | | | | | | | | | | | | | | Before disposing of a small appliance containing CFC-12, it is necessary to:   |  |  |  |  | | --- | --- | --- | --- | | a. | pressurize with nitrogen | c. | turn upside down | | b. | recover the refrigerant | d. | thoroughly leak check | | | | | | | | | | |
| 36. | | | | | | | | | | | | | | | Hydrochloric and hydrofluoric acids are:   |  |  |  |  | | --- | --- | --- | --- | | a. | caused from CFCs or HCFCs in the presence of moisture being exposed to high heat | c. | to be avoided when handling with bare hands | | b. | damaging to the windings found in hermetic compressors | d. | all of the above | | | | | | | | | | | |
| 37. | | | | | | | | | | | | | | A system has been operating with a complete restriction at the capillary tube inlet, what access is required for recovery?   |  |  |  |  | | --- | --- | --- | --- | | a. | on access valve on the low side of the system | c. | one access valve on the high side | | b. | two valves, high and low side | d. | one access on the evaporator and one on the low side | | | | | | | | | | | | |
| 38. | | | | | | | | | | | | | Which of the following refrigerants can be mixed?   |  |  |  |  | | --- | --- | --- | --- | | a. | R-12 & R-134a | c. | R-22 & R-502 | | b. | R-12 & R-11 | d. | None of the above | | | | | | | | | | | | | |
| 39. | | | | | | | | | | | | CFC and HCFC refrigerants cause suffocation because:   |  |  |  |  | | --- | --- | --- | --- | | a. | they contain acidic substances | c. | they are lighter than air and will rise | | b. | they are heavier than air and displace oxygen | d. | the smell terrible preventing you from breathing | | | | | | | | | | | | | | |
| 40. | | | | | | | | | | | A nitrogen tank should always be equipped with a(n):   |  |  |  |  | | --- | --- | --- | --- | | a. | pressure regulator | c. | low loss fitting | | b. | EPR valve | d. | air purger | | | | | | | | | | | | | | | |
| 41. | | | | | | | | | | Nitrogen used for brazing purposes, holding charges, or leak checking:   |  |  |  |  | | --- | --- | --- | --- | | a. | must be recovered | c. | may be vented to the atmosphere | | b. | should not be used. It can saturate the system with moisture | d. | could be recovered passively | | | | | | | | | | | | | | | | |
| 42. | | | | | | | | | Line tapping and piercing valves should always be removed from a system after the repairs are completed because:   |  |  |  |  | | --- | --- | --- | --- | | a. | they restrict the flow of refrigerant | c. | the neoprene gasket will eventually fail and cause a leak | | b. | they are costly | d. | they destroy the appearance | | | | | | | | | | | | | | | | | |
| 43. | | | | | | | | CFCs will not be manufactured in the USA after:   |  |  |  |  | | --- | --- | --- | --- | | a. | 2000 | c. | 2005 | | b. | 1995 | d. | 1996 | | | | | | | | | | | | | | | | | | |
| 44. | | | | | | | The law states that leaks in small appliances:   |  |  |  |  | | --- | --- | --- | --- | | a. | must be repaired | c. | do not have to be repaired but it is a good practice to repair whenever possible. | | b. | be repaired if the system contains more than five (5) pounds of refrigerant | d. | be repaired if the leak rate exceeds two (2) pounds a year | | | | | | | | | | | | | | | | | | | |
| 45. | | | | | | To work on small appliances after November 14, 1993, a technician must be certified as:   |  |  |  |  | | --- | --- | --- | --- | | a. | Type I | c. | Universal | | b. | Type II | d. | A or C | | | | | | | | | | | | | | | | | | | | |
| 46. | | | | | The required service aperture usually found on small appliances is:   |  |  |  |  | | --- | --- | --- | --- | | a. | the three-way service valve | c. | the schrader valve | | b. | the process stub | d. | the door handle | | | | | | | | | | | | | | | | | | | | | |
| 47. | | | | Package terminal heat pumps with less than five (5) pounds of refrigerant must be serviced by technicians with a \_\_\_\_\_ certification.   |  |  |  |  | | --- | --- | --- | --- | | a. | Type I | c. | Type III | | b. | Type II | d. | Type II or III | | | | | | | | | | | | | | | | | | | | | | |
| 48. | | | Which refrigerants have a “0” ODP?   |  |  |  |  | | --- | --- | --- | --- | | a. | CFCs | c. | HFCs | | b. | HCFCs | d. | All of the above | | | | | | | | | | | | | | | | | | | | | | | |
| 49. | | Disposable refrigerant cylinders should be disposed of by:   |  |  |  |  | | --- | --- | --- | --- | | a. | rendering useless and sent to salvage | c. | using for a recovery cylinder | | b. | taking to a service station and using for an air tank | d. | refill with other refrigerants | | | | | | | | | | | | | | | | | | | | | | | | |
| 50. | Which refrigerant is most commonly used today as a replacement for R-12 in newly manufactured small appliances?   |  |  |  |  | | --- | --- | --- | --- | | a. | r-22 | c. | r-134a | | b. | r-502 | d. | r-123 | | | | | | | | | | | | | | | | | | | | | | | | | |